Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Mr. Charles J. Packard President
Facility Name:	Industrial Power Generating Corporation
Facility Location:	Amelia Plant Maplewood Recycling & Waste Disposal Amelia, Virginia
Registration Number:	31047
Permit Number:	PRO-31047

September XX, 2004
Effective Date

September XX, 2009
Expiration Date

Robert G. Burnley
Director, Department of Environmental Quality

September XX, 2004
Signature Date

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I. Facility Information

Permittee
Industrial Power Generating Corporation (INGENCO)
Amelia Plant
2250 Dabney Road
Richmond, VA 23230

Facility
Industrial Power Generating Corporation (INGENCO)
Amelia Plant
Maplewood Recycling & Waste Disposal Facility
Amelia, Virginia

Responsible Official
Mr. Charles J. Packard
President

Contact person
Mr. Robert L. Greene , Ph.D
Environmental Compliance Manager
(804) 521-3557 FAX 3583

AIRS Identification Number: 51-007-00011

Facility Description: SIC Code 4931 – The facility is a 16 MW power generation facility. This is one of several facilities in this region, which is run by the operating company, INGENCO. This facility is located in an attainment area. The facility is a State Major Source limited to 240 TPY or less for NOx and CO.

II. **Emission Units**

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
E1-E48	S-1 S-2 S-3 S-4 S-5 S-6 S-7 S-8	350 kW Generators (8 Groups of 6 units)	Each engine is rated at 3.57 MMBtu/hour heat input, Detroit Diesel Model Series 6063-TK35 Engine.	NA - air-to-fuel ratio control, turbo-charging, custom-built dry after-coolers and charge-air cooling systems.	NA	NOx, CO, SOx, VOC, PM, PM10	06/29/2004

III. Process Equipment Requirements – E-1 through E-48

A. Limitations

1. **Emission Controls** – Nitrogen Dioxide emissions from the engines (E1-E48) shall be controlled by the original equipment manufacturer's air-to-fuel ratio control, turbocharging and charge-air cooling systems. The air-to-fuel ratio shall be controlled by a separate engine control module for each engine.
(9 VAC 5-50-260 and Condition No. 3 of the NSR permit dated 06/29/2004)

2. **Emission Controls** – Nitrogen Dioxide emissions from the engines (E1-E48) shall also be controlled by supplementary inlet charge-air water-to-air cooling and oversized inlet charge and exhaust ducts. The cooling system shall be capable of maintaining an hourly average inlet charge-air temperature not greater than 140°F. Water shall be provided continuously to each engine inlet charge-air cooler and each engine shall have independent temperature measurement capabilities. The inlet charge-air cooler shall be provided with adequate access for inspection and shall be in operation when the engine is operating.
(9 VAC 5-50-260, 9 VAC 5-80-1180A1 and Condition No. 4 of the NSR permit dated 06/29/2004)

3. **Emission Controls** – Nitrogen Dioxide emissions from the engines (E1-E48) shall be controlled by the combustion of treated landfill gas whenever any of the engines are operated in the dual fuel mode. The extent to which the dual fuel operations control Nitrogen Dioxide emissions is dependent upon the heat substitution rate supplied by the treated landfill gas. To ensure that a stable supply of treated landfill gas is being diverted to the facility, the permittee shall install and operate a device to monitor and record the process of diverting the collected landfill gas from the landfill gas collection system in order to ensure that process of diverting the landfill gas is operated in accordance with the permittee's standard operating procedures.
(9 VAC 5-50-260, 9 VAC 5-80-1180A1 and Condition No. 5 of the NSR permit dated 06/29/2004)

4. **Emission Controls** – Carbon Monoxide emissions from the engines (E1-E48) shall be controlled by limiting the ratio of treated landfill gas heat input to total fuel heat input to less than 50% for each period of continuous dual-fuel operation. An increase in the heat input ratio to the engines (E1-E48) to greater than 50% may require a permit to modify and operate. The permittee may, on prior approval from the Piedmont Regional Office, operate for short periods at heat input ratios greater than 50% for the purposes of research and development.
(9 VAC 5-80-1180, 9 VAC 5-170-160 and Condition No. 6 of the NSR permit dated 06/29/2004)

5. **Emission Controls** – Any uncontrolled venting of landfill gas from either the engines (E1-E48), the landfill gas treatment system, or the treated landfill gas transport system is prohibited. All treated landfill gas shall be purged from the treated landfill gas transport system prior to shutting down any engine after operating in the dual fuel mode. All atmospheric vents in the treated landfill gas moving system shall be controlled by either removing each vent **or** by installing and operating a device to divert the emissions from all vents to an approved landfill gas control system.
(9 VAC 5-50-260, 9 VAC 5-50-410, 9 VAC 5-80-1180, 9 VAC 5-170-160 and Condition No. 7 of the NSR permit dated 06/29/2004)

6. **Emission Controls** – The approved fuels for the engines (E1-E48) shall be treated landfill gas, distillate oil, MODEF (minerial oil dielectric fluid), and number 4 distillate oil only. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-50-260, 9 VAC 5-80-1180 and Condition No. 8 of the NSR permit dated 06/29/2004)

7. **Emission Controls** – Particulate Matter and Volatile Organic Compounds emissions from the engines (E1-E48) shall be controlled by proper engine maintenance practices. The engines shall be repaired and maintained to prevent excess emissions of particulate matter (in the form of TSP and PM-10) and volatile organic compounds.
(9 VAC 5-50-260, 9 VAC 5-80-1180 and Condition No. 9 of the NSR permit dated 06/29/2004)

8. **Emission Controls** – All components of the treated landfill gas control system, which consists of each one of the engines (E1-E48), the treated landfill gas moving system, and the landfill gas treatment system, as specified in Condition 11, shall be in operation whenever the permittee is operating the engines in a dual fuel mode. If any component of the landfill gas treatment system or treated landfill gas transport system malfunctions, the treated landfill gas transport system shall be shut down and all untreated landfill gas shall be diverted to the remaining engines or to the utility flare. If any engine or set of engines malfunctions, that portion of treated landfill gas shall be diverted to the remaining engines, or to the utility flare (CF-1).
(9 VAC 5-50-260, 9 VAC 5-50-410 and Condition No. 10 of the NSR permit dated 06/29/2004)

9. **Fuel Throughput** - The facility shall limit the consumption of fuel such that neither the total NOx or total CO emissions exceed 240 tons, for any consecutive 12-month period. The emissions shall be calculated monthly as the sum of each consecutive 12-month period according to the following equations:

Given:

NO_X => [((“A” x “CV_{DO}” x 1MMBtu)/1,000,000 Btu) x EF_{NOXDO}) – (((“B” x “CV_{LFG}” x 1 MMBtu)/1,000,000 Btu) x EF_{CODO})]/2,000 lb/ton

CO => [((“A” x “CV_{DO}” x 1MMBtu)/1,000,000 Btu) x EF_{NOXLFG}) +(((“B” x “CV_{LFG}” x 1 MMBtu)/1,000,000 Btu) x EF_{COLFG})]/2,000 lb/ton

When:

A = the gallons of liquid fuel consumed as: distillate oil, MODEF, or number 4 distillate oil .

B = the cubic feet of landfill gas consumed

CV_{DO} = heat content of the corresponding liquid fuel as: distillate oil, MODEF, or number 4 distillate oil as specified in permit condition 10.

EF_{NOXDO} = 2.2 lbs/MMBTU; Emission Factor for distillate oil used in NOx calculation.

EF_{CODO} = 1.0 lb/MMBTU; Emission Factor for distillate oil used in CO calculation.

CV_{LFG} = the heat value of treated landfill gas in Btu/cubic foot as determined by permit condition 25.

EF_{NOXLFG} = .24 lbs/MMBTU; Emission Factor for land fill gas used in NOx calculation.

EF_{COLFG} = 4.7 lbs/MMBTU; Emission Factor for land fill gas used in CO calculation.

Such that:

NOx <= 240 tpy calculated as the sum of each consecutive 12 month period as a product of the heat input contribution from each individual fuel source

CO <= 240 tpy calculated as the sum of each consecutive 12 month period as a product of the heat input contribution from each individual fuel source

Each equation is valid only if the total heat input contribution from treated landfill gas heat input is less than 50% of the total heat input for any period of continuous dual-fuel operation:
expressed as - treated landfill gas heat input to total fuel heat input (for each period of continuous dual-fuel operation), according to the following equation:

$$HI_{lfg} < \frac{(\text{“B” x “}CV_{LFG}\text{”})}{(\text{“A” x “}CV_{DO}\text{” })+(\text{“B” x “}CV_{LFG}\text{” })} \times 100$$

HI_{lfg} < 50%

The Emission factors EF_{NOXDO}, $EF_{CODO,}$ $EF_{NOXLFG,}$ and EF_{COLFG} used to calculate NOx and CO may be modified based on actual test data and as approved by Administrator, Piedmont Regional Office.

(9 VAC 5-80-1180 and Condition No. 22 of the NSR permit dated 06/29/2004)

10. **Fuel Specifications** - The fuel oils, MODEF and treated landfill gas shall meet the specifications below:

Distillate Oils:	
Maximum sulfur content per shipment:	0.2%
Heat content:	137,000 BTU/gallon
RESIDUAL OIL which meets the ASTM [D396] specifications for No. 4 fuel oil:	
Maximum sulfur content per shipment:	0.5%
Heat content:	144,000 BTU/gallon
Mineral Oil Dielectric Fluid (MODEF)	
Maximum sulfur content per shipment:	0.2%
Heat content:	145,000 BTU/gallon
Treated Landfill Gas:	
*Minimum heat content:	350 BTU/scf

The heat content of each fuel as listed shall be used to calculate the facilities emissions as defined by the emission factors and limits found in Permit Conditions 9, 16 and 39.
*The heat content of the Treated Landfill Gas shall be analyzed for Gross Calorific Value using methods outline in Permit Condition 26.
(9 VAC 5-80-1180 and Condition No. 18 of the NSR permit dated 06/29/2004)

11. **Fuel Specifications** - TREATED LANDFILL GAS shall be that which is produced by the Maplewood Recycling & Waste Disposal Facility as that facility is permitted by the Virginia Department of Environmental Quality and has been processed in accordance with 40 CFR 60.752(b)(2)(iii)(C). The landfill gas treatment system, at a minimum, shall be composed of a dewatering process, filtration through a 10-micron filter and compression. The facility's dewatering process shall consist of a tertiary or polishing tank with a total capacity of 250 gallons. The primary and secondary knockout tanks, with a combined condensate processing capacity of 3000 gallons of per day, are located at the Maplewood Recycling & Waste Disposal Facility (Registration Number 30993). All landfill gas consumed at the permitted facility shall pass through each component of the landfill gas treatment process prior to use in the combustion process.
(9 VAC 5-80-1180 and Condition No. 19 of the NSR permit dated 06/29/2004)

12. **Fuel Specifications** - Fuels shall meet the specifications below:

MODEF (mineral oil dielectric fluid) contaminants shall not exceed the limits specified below. Maximum sulfur content per shipment shall be 0.5% by weight.

PCB	49 ppm, by weight
Arsenic	5 ppm, by weight
Cadmium	2 ppm, by weight
Chromium	10 ppm, by weight
Lead	25 ppm, by weight
Halogens (total)	1000 ppm, by weight
Flash Point	100º F, minimum

(9 VAC 5-80-1180, 9 VAC 5-170-160 and Condition No. 20 of the NSR permit dated 06/29/2004)

13. **Fuel Specifications** – The maximum sulfur content of the distillate oil to be burned in the engines (E1-E48) shall not exceed 0.2 percent by weight per shipment or 0.5% percent by weight per shipment for No. 4 fuel oil. The permittee shall maintain records (supplier fuel analysis) of all oil shipments purchased. These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five years.
(9 VAC 5-80-1180, 9 VAC 5-50-50 and Condition No. 21 of the NSR permit dated 06/29/2004)

14. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil or number 4 distillate oil. Each fuel supplier certification shall include the following:

    a. The name of the fuel supplier;

    b. The date on which the distillate oil or number 4 distillate oil was received;

    c. The volume of distillate oil or number 4 distillate oil delivered in the shipment;

    d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications for numbers 1 or 2 fuel oil;

    e. The heat value (in Btu/gal) of the distillate oil or number 4 distillate oil; and

    f. A statement that the sulfur content of the distillate oil or number 4 distillate oil does not exceed 0.2 % by weight and 0.5% by weight, respectively.

These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five years.
(9 VAC 5-170-160 and Condition No. 23 of the NSR permit dated 06/29/2004)

15. **Fuel Certification** - The permittee shall, by laboratory analysis verify that all contaminants listed in permit condition 12 do not exceed the limit contained in Condition 12. A MODEF sample shall be collected every month from the MODEF stored on site. Each monthly laboratory analysis shall include the following:

    a. The test methods used to determine the contaminant concentration in the MODEF;

    b. The concentration of each contaminant detected in the sample;

    c. The detection limit for each of the contaminants listed in condition 12;

    d. The permittee will not be required to analyze a monthly MODEF sample during any given month when MODEF was not combusted in the engines (E1-E48).

    These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five years.
    (9 VAC 5-50-50, VAC 5-60-20, 9 VAC 5-80-1180, 9 VAC 5-170-160 and Condition No. 24 of the NSR permit dated 06/29/2004)

16. **Emission Limits** - Emissions from the operation of any of the engines (E1-E48) when the facility is operated in either the single fuel or the dual fuel mode shall not exceed the limits specified below:

Particulate Matter	0.15	lb/MMBtu
PM-10	0.15	lb/MMBtu
Sulfur Dioxide	0.50	lb/MMBtu
Nitrogen Dioxide	2.20	lb/MMBtu
Carbon Monoxide	3.10	lb/MMBtu
Volatile Organic Compounds	0.35	lb/MMBtu

    Compliance with the lb/MMBtu limits for PM, PM-10, NOx, CO and VOC shall be determined by stack testing. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1 through 8 and 10.
    (9 VAC 5-50-260, 9 VAC 5-50-180 and Condition No. 25 of the NSR permit dated 06/29/2004)

B. Periodic Monitoring

17. **Monitoring Devices** – The facility shall be equipped with devices to continuously measure and record treated landfill gas consumption, distillate oil, MODEF, and number 4 distillate oil consumption by the engines (E1-E48). Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each device shall be provided with adequate access for inspection and shall be in operation when the facility is operating.
(9 VAC 5-80-1180, 9 VAC 5-50-20, 9 VAC 5-50-260, 9 VAC 5-50-410 and Condition No. 11 of the NSR permit dated 06/29/2004)

18. **Monitoring Devices** – Each of the engines (E1-E48) shall be equipped with a device to continuously measure engine inlet charge-air temperature. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the facility is operating.
(9 VAC 5-80-1180, 9 VAC 5-50-20, 9 VAC 5-50-260 and Condition No. 12 of the NSR permit dated 06/29/2004)

19. **Monitoring Devices** – The facility shall be equipped with devices to continuously measure the pressure within the treated landfill gas transport system. At a minimum, devices shall be located just before and just after the 10-micron filter and after the completed treatment process. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the facility is operating.
(9 VAC 5-80-1180, 9 VAC 5-50-20, 9 VAC 5-50-260, 9 VAC 5-50-410 and Condition No. 13 of the NSR permit dated 06/29/2004)

20. **Monitoring Device Observation** – The devices used to measure treated landfill gas, distillate oil, MODEF, or number 4 distillate oil consumption shall be observed by the permittee after each period of continuous operation using any form of liquid fuel and then again once the engines have ceased operation. In addition, the devices used to measure each volume of fuel consumed by the engines (E1-E48) whenever the engines are operated in dual fuel mode shall be read each time controlled landfill gas is diverted from the utility flare (CF-1) to the facility and then again whenever the engines are returned to single fuel operations. The permittee shall keep a daily-log of the observations of each device, to include each set of readings that define each period of dual fuel operations.
(9 VAC 5-50-50 F and Condition No. 14 of the NSR permit dated 06/29/2004)

21. **Monitoring Device Observation** – The monitoring devices used to measure inlet charge-air temperature shall be observed by the permittee with a frequency of not less than hourly whenever the engines are operating. The permittee shall keep a daily log of the temperature observations from the monitoring devices including the time the observation was recorded.
(9 VAC 5-50-50 F and Condition No. 15 of the NSR permit dated 06/29/2004)

22. **Monitoring Device Observation** – The monitoring device used to measure the pressure in the treated landfill gas system shall be observed by the permittee whenever treated landfill gas is combusted in the engines with a frequency of not less than daily to ensure good performance of the treatment system. The permittee shall keep a daily log of the observations from the monitoring device, including the change in pressure across the 10-micron filter.
(9 VAC 5-50-50 F, 9 VAC 5-50-410 and Condition No. 16 of the NSR permit dated 06/29/2004)

23. **Landfill Gas Treatment Equipment -** The entire landfill gas treatment system as specified in Condition 11 is required to comply with 40 CFR 60.752 (b)(2)(iii) and shall be installed and operational whenever landfill gas is being transferred to any of the forty eight engines (E1-E48). Verification of satisfactory operation of treatment equipment shall, at a minimum, include certification that manufacturer's written requirements or recommendations for installation, operation, and maintenance of the devices shall be followed.
(9 VAC 5-50-20, 9 VAC 5-50-260, 9 VAC 5-50-410 and Condition No. 17 of the NSR permit dated 06/29/2004)

24. **Treated Landfill Gas Moisture Content** - The permittee shall drain the polishing tank referenced in Condition 11 at least once each day that landfill gas is consumed by the facility, and observe the presence or absence of any water collected in the tank. The permittee shall maintain a daily log of these observations, which shall include the date and time of each observation.
(9 VAC 5-50-20 E, 9 VAC 5-50-30 G, 9 VAC 5-80-1180 and 9 VAC 5-170-160 and Condition No. 34 of the NSR permit dated 06/29/2004)

25. **Landfill Gas Gross Calorific Value Tests** - The permittee shall conduct tests to determine the treated landfill gas gross calorimetric value in Btu/ft^3 (referred to as Treated Landfill Gas in Condition 10) in order to demonstrate compliance with the both the fuel throughput limits and the emission limits contained in this permit. The treated landfill gas gross calorimetric value tests shall be performed and recorded no less than quarterly, with the first test conducted within 30 day of the issuance of the permit. The most representative gross calorific value shall be substituted in the equations in Condition 9 for the purpose of calculating the facilities monthly emissions. All testing shall be performed in accordance to EPA reference method or equivalent method as approved by the Administrator, Piedmont Regional Office.
(9 VAC 5-50-20 E, 9 VAC 5-50-30 G and 9 VAC 5-80-1180 and 9 VAC 5-170-160 and Condition No. 35 of the NSR permit dated 06/29/2004)

26. **Landfill Gas Gross Calorific Value Tests** - The minimum heat content of the landfill gas is 350 BTU/scf, as specified in Condition 10. If during any Landfill Gas Gross Calorific Value Test event it is determined that the heat content of the landfill gas has dropped below 350 BTU/scf the permittee shall:

    a. Notify the Piedmont Regional Office in accordance with Condition F.

    b. Cease all dual fuel operations, the facility shall only operate in the single fuel mode until such time that the permittee can:

        i. Evaluate the integrity of the landfill gas treatment and transport systems for the purpose of identifying potential excess ambient air infiltration into the gas transport system. If excess air infiltration has occurred, document both the actions taken and the resulting findings.

    c. Prior to resuming dual fuel operations re-test the Landfill Gas Gross Calorific Value until such time that 2 consecutive Landfill Gas Gross Calorific Value Tests, conducted at 4-hour intervals, have produced results exceeding the minimum heat content **or**

    d. Provide the Director, Piedmont Regional Office with performance testing capable of verifying that treated landfill gas with a reduced heat content is capable of producing emissions rates comparable to those defined by Condition 9.

    (9 VAC 5-50-20 E, 9 VAC 5-50-30 G and 9 VAC 5-80-1180 and 9 VAC 5-170-160 and Condition No. 36 of the NSR permit dated 06/29/2004)

27. **Performance Validation Testing** - The performance tests required by permit condition 31 and 32 shall be conducted within a 275 day cycle, starting from the completion date of the testing as required in Condition 31. Each testing cycle shall evaluate the performance of a different set of 6 engines (stack). Separate tests shall be made while operating in single fuel mode using 100% liquid fuel and in dual fuel mode using various quantities of landfill gas and liquid fuel. Tests shall be performed at no less than 90% of the rated capacity of the electrical output. After a period of not less than four consecutive test cycles, the testing requirements shall be reviewed by the Director, Piedmont Regional Office, and a determination made regarding continuation of the test program within 275 day intervals or modification of the test program to some other time interval. Tests shall be reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-20, 9 VAC 5-50-30 G, 9 VAC-5-50-410 and 9 VAC 5-80-1200 and Condition No. 37 of the NSR permit dated 06/29/2004)

28. **Performance Validation Testing** - Concurrently with the initial performance test as required by Condition 27, the permittee shall determine the moisture content of the treated landfill gas, as sampled, prior to combustion in any of the engines (E1-E48). The moisture content testing shall be conducted in accordance with 40 CFR Part 60, Appendix A, Method 4. Each test shall be reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the test are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-20, 9 VAC 5-50-30 G, 9 VAC-5-50-410 and 9 VAC 5-80-1200 and Condition No. 38 of the NSR permit dated 06/29/2004)

29. **Test/Monitoring Ports -** The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested at the appropriate locations.
(9 VAC 5-50-30 F and Condition No. 29 of the NSR permit dated 06/29/2004)

C. Recordkeeping

30. **On Site Records -** The permittee shall maintain records of emission data and operating devices as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

    a. Annual consumption of landfill gas, distillate oil, MODEF, and number 4 distillate oil calculated monthly as the sum of each consecutive 12 month period. Annual consumption of landfill gas, distillate oil, MODEF, and number 4 distillate oil shall be calculated monthly as the sum of each consecutive 12 month period.

    b. All fuel supplier certifications.

    c. All Landfill Gas Gross Calorific Value Testing results.

    d. All MODEF laboratory analysis reports.

e. Monthly and annual emissions (in tons) using calculation methods approved by the Piedmont Regional Office to verify compliance with the emission limitations in Condition numbers 9, 16 and 39. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

f. Daily records of fuel consumption for every period of operation to verify compliance with Conditions numbers 4, 9, 17 and 20.

g. Daily records of treated landfill gas heat input as the ratio of total heat input for every period of continuous operation to verify compliance with Condition numbers 4 and 9. Heat input calculations shall be based on the data required by Condition 20.

h. Hourly records of engine inlet charge-air temperature reading to verify compliance with Condition number 2.

i. The treated landfill gas transport system pressure readings to verify compliance with Condition 22.

j. All 1 hour periods of operation during which the charge-air temperature as described in Condition 2 exceeds the average charge-air temperature limit of 140°F.

k. Results of all stack tests, visible emission evaluations and performance evaluations. At a minimum to include all treated landfill gas moisture content monitoring results and landfill gas heat content monitoring results.

l. Scheduled and unscheduled maintenance records, maintenance schedules, and service records for all air pollution related equipment

m. Operating procedures and operator training records for all air pollution related equipment

n. All records generated by the device installed for the purpose of continuously monitoring and recording the status of the device used divert the collected landfill gas from the utility flare (CF-1) to the landfill gas treatment system and then to the engines (E1-E48), as required by Condition number 3.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50 and Condition No. 28 of the NSR permit dated 06/29/2004)

D. Testing

31. **Initial Performance Test** - Initial performance tests shall be conducted for nitrogen oxides and carbon monoxide from the engines (E1-E48) to determine compliance with the emission limits contained in Condition numbers 9, 16, and 39. Separate tests shall be made while operating in single fuel mode using 100% distillate oil and in dual fuel mode using various quantities of landfill gas and distillate oil. Tests shall be performed at no less than 90% of the rated capacity of the electrical output on a minimum of 1 set of 6 engines. The tests shall be performed, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after issuance date of this permit. Tests shall be reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410, VAC 5-80-1200 and Condition No. 30 of the NSR permit dated 06/29/2004)

32. **Initial Performance Test** - Initial performance tests shall be conducted for criteria pollutant emissions from the 48 dual-fuel dies Initial performance tests shall be conducted, within 60 day of The Piedmont Regional Office receiving notice of the combustion of Number 4 fuel oil, for nitrogen oxides and carbon monoxide from the engines (E1-E48), to determine compliance with the emission limits contained in Condition numbers 9, 16, and 39. Separate tests shall be made while operating in single fuel mode and in dual fuel mode using various quantities of landfill gas and Number 4 fuel oil. Tests shall be performed at no less than 90% of the rated capacity of the electrical output on a minimum of 1 set of 6 engines. Tests shall be reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410, VAC 5-80-1200 and Condition No. 31 of the NSR permit dated 06/29/2004)

33. **Initial Performance Test -** Concurrently with the initial performance test as required in Conditions 31 and 32, the permittee shall determine the moisture content of the treated landfill gas, as sampled, prior to combustion in any of the engines (E1-E48). The moisture content testing shall be conducted in accordance with 40 CFR Part 60, Appendix A, Method 4. Each test shall be reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the test are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410, VAC 5-80-1200 and Condition No. 32 of the NSR permit dated 06/29/2004)

34. **Visible Emissions Evaluation -** Concurrently with the initial performance tests in 31 and 32, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the permittee on the following equipment: engines (E1-E36). Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six-minute average. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed, and reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Piedmont Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410, VAC 5-80-1200 and Condition No. 33 of the NSR permit dated 06/29/2004)

35. **Test Method -** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC/ NMOC	EPA Method 18 or 25A/25C
NOx	EPA Method 7E
SO2	EPA Method 6C
CO	EPA Method 10
PM/PM10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

C. Reporting

36. **Initial Notifications** - The permittee shall furnish written notification to the Director, Piedmont Region:

a. The actual date on which construction of the 12 engines (E37-E48) commenced within 30 days after such date.
b. The anticipated start-up date of the 12 engines (E37-E48) postmarked not more than 60 days or less than 30 days prior to such date.
c. The actual start-up date of the 12 engines (E37-E48 within 15 days after such date.
d. The anticipated date of the 12 engines (E37-E48 combusting treated landfill gas postmarked not more than 60 days or less than 30 days prior to such date.
e. The actual date of the 12 engines (E37-E48 initially combusting treated landfill gas, postmarked within 15 days after such date.

(9 VAC 5-50-50 and Condition No. 39 of the NSR permit dated 06/29/2004)

37. **Control Equipment Removal Notification -** The permittee shall furnish notification to the Director, Piedmont Region of the date of removal or cessation of operation of the control equipment 30 days prior to such date.
(9 VAC 5-50-410 and Condition No. 40 of the NSR permit dated 06/29/2004)

IV. Facility Wide Conditions

A. Limitations

38. **Visible Emission Limit -** Visible emissions from the stacks (S1-S8) shall not exceed 10 percent opacity whenever the engines are operated in a single fuel mode except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity. Visible emissions from the stacks (S1-S8) shall not exceed 20 percent opacity whenever the engines are operated in a dual fuel mode except during one six-minute period in any one-hour in which visible emissions shall not exceed 30 percent opacity. All visible emissions rates shall be determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80, 9 VAC 5-50-260 and Condition No. 27 of the NSR permit dated 06/29/2004)

39. **Plantwide Emission Limits** - Total emissions from the electrical power generating plant whether the facility is operated in the single fuel or the dual fuel mode shall not exceed the limits specified below, calculated monthly as the sum of each consecutive 12 month period:

Particulate Matter	25.7 lb/hr	21.0 tons/yr
PM-10	25.7 lb/hr	21.0 tons/yr
Sulfur Dioxide	86.5 lb/hr	29.0 tons/yr
Nitrogen Oxides (as NO_2)	377.0 lbs/hr	240.0 tons/yr
Carbon Monoxide	531.2 lbs/hr	240.0 tons/yr
Volatile Organic Compounds	60.0 lbs/hr	37.0 tons/yr

Compliance with the lb/hr may be determined by additional stack testing or other appropriate means upon request of the Department. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of the emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1 through 8 and 11.
(9 VAC 5-50-260, 9 VAC 5-50-180 and Condition No. 26 of the NSR permit dated 06/29/2004)

V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
T1	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T2	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T3	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T4	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T5	Lube oil storage tank	5-80-720 B.	VOC	300 Gallon
T6	Lube oil storage tank	5-80-720 B.	VOC	300 Gallon

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of applicability
No inapplicable requirements identified.	-	-

Nothing in this permit shield shall alter the provisions of § 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to § 114 of the federal Clean Air Act, (ii) the Board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

VII. Future Applicable Requirements

None noted.

VII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent with 9 VAC 5-80-80 has been submitted to the Department by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

   f. The operating conditions existing at the time of sampling or measurement.
   (9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
   (9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purposes of this permit, a deviation means any condition determined by observation, data from any monitoring protocol or any other monitoring which is required by the permit that can be used to determine compliance. Deviations include exceedances documented by continuous emission monitoring or excursions from control performance indicators documented through periodic or compliance assurance monitoring.
   (9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to § 114(a)(3) and § 504(b) of the Federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.
3. The identification of each term or condition of the permit that is the basis of the certification.
4. The compliance status.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the certification period.
6. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
7. The status of compliance with the terms and conditions of this permit for the certification period.
8. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Region within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Piedmont Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Region.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Action for Cause

This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
(9 VAC 5-80-110 G.4)

Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:

a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is the potential of, a resulting emissions increase;

b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;

c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emission cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;

d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;

e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;

f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);

g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and by 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355.
(9 VAC 5-80-110 H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and

5. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-50)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 1.
(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

   b. The permitted facility was at the time being properly operated.

   c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

   d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The board may suspend, under such conditions and for such period of time as the board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A - F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110 except subsection N shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

To: **Air Compliance Manager**
Department of Environmental Quality – Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

From: **(Facility Name)**

Registration No. _____

Re: **TITLE V ANNUAL COMPLIANCE CERTIFICATION**

Date:

Please find attached our Title V Annual Compliance Certification for the period from ____/____/_____ to ____/____/_____. It identifies each term or condition of the permit that is the basis of the certification. All deviations and periods of non-compliance for the period have been addressed in semi-annual monitoring reports that have either been previously submitted or are enclosed.

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who mange the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

(*Signature)* *(Name & Title)*

cc: Director, Air and Waste Division (Mail drop 3AP00)
United States Environmental Protection Agency -- Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(Annual Compliance Certifications are due 60 days following end of reporting period.)

To: **Air Compliance Manager**
Department of Environmental Quality – Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

From: **(*Facility Name)*** **Reg. No. _____**
Re: **PROMPT DEVIATION REPORT – Pursuant to Title V Permit**
Date:
This confirms the deviation reported to the Regional Office at _____ o'clock on ____/____/_____. The details are described below. The deviation may have caused excess emissions for more than one hour, consistent with specified averaging times. None of these deviations were related to a malfunction.

Start date & time:	**End date & time:**	**Estimated Duration:**
Deviation from which permit condition (*condition number and brief description*):		
Description of incident (*including emission unit affected)*:		
Description of Monitoring Requirement for affected unit(s):		
Probable cause:		
Description of corrective measures taken (*demonstrating a timely & appropriate response*):		
Description of preventive measures taken:		

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who mange the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

(*Signature)*
(Name & Title)

To: Air Compliance Manager
Department of Environmental Quality – Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

From: (*Facility Name)* Reg. No. _____

Re: SEMI-ANNUAL MONITORING REPORT – Pursuant to Title V Permit

Date:

The following monitoring report is submitted as required by our Title V permit. For the purposes of this report, deviation means (1) exceedances of emission limits, as determined by such means as stack testing, continuous emission monitors, parametric monitoring and EPA Method 9 visible emission evaluations; (2) excursions from control device operating parameter requirements such as afterburner temperature, scrubber flow rate, baghouse pressure drop; (3) excursions from operational restrictions things such as throughput, fuel quality, and coating VOC and HAP content; and (4) failure to meet monitoring, record keeping or reporting requirements. The report addresses all data points, which are above a standard, limit etc, according to the averaging period, if any, specified in the permit. If no averaging period is specified in the permit, then any monitored reading is considered a deviation to be reported. Deviations are reported regardless of whether they may have caused excess emissions or whether they were the result of a malfunction.

The period covered by the report is from ____/____/_____ to ____/____/_____.

During the reporting period:

☐ No deviations from permit requirements occurred during this semi-annual reporting period. (We conducted all required monitoring and associated record keeping and reporting. Required monitoring revealed no deviations from permit requirements.)

☐ We failed to conduct required monitoring/record keeping/reporting as explained on the attached form.

☐ We identified deviations as a result of required monitoring:

- ☐ Deviations were addressed in CEM Excess Emission Report(s) dated: _____
- ☐ Deviations were addressed in Fuel Report(s) dated: _____
- ☐ Deviations were addressed in MACT Report(s) dated: _____
- ☐ Deviations due to malfunctions were addressed in letters dated: _____
- ☐ Deviations were addressed in other report(s) dated: _____
  Type of report:_____
- ☐ Deviations were previously described in Prompt Deviation Reports dated:
  _____ _____ _____ _____ _____
  _____ _____ _____ _____ _____
- ☐ "Other" deviations, which were not previously reported, are described in the attachment.

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who mange the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

(*Signature)* *(Name & Title)*

FAILURE TO MONITOR, KEEP RECORDS OR REPORT **Registration No. _____** **Page _____ of _____**
Submitted as Part of Semi-Annual Monitoring Report

Permit Condition No. & DESCRIPTION OF REQUIREMENT	DESCRIPTION OF DEVIATION (including date)	REASON FOR DEVIATION & CO

Annual Compliance Certification Registration No. _______________ Page ______ of _______

Cond. No.	TERMS & CONDITIONS CONTAINED IN THE PERMIT *(list in order)*	MEANS OF DETERMINING COMPLIANCE STATUS	TYPE OF DATA THE MEANS PROVIDES	PERIODS OF NON-COMPLIANCE
			☐ **Continuous** ☐ **Intermittent**	☐ **Yes** ☐ **No**
			☐ **Continuous** ☐ **Intermittent**	☐ **Yes** ☐ **No**
			☐ **Continuous** ☐ **Intermittent**	☐ **Yes** ☐ **No**
			☐ **Continuous** ☐ **Intermittent**	☐ **Yes** ☐ **No**
			☐ **Continuous** ☐ **Intermittent**	☐ **Yes** ☐ **No**
			☐ **Continuous** ☐ **Intermittent**	☐ **Yes** ☐ **No**
			☐ **Continuous** ☐ **Intermittent**	☐ **Yes** ☐ **No**
			☐ **Continuous** ☐ **Intermittent**	☐ **Yes** ☐ **No**

Form approved for use 9/18/00

"OTHER" DEVIATIONS **Registration No. _____** **Page _____ of _____**
Submitted as Part of Semi-Annual Monitoring Report

Condition No. & Description of Requirement	**Description of Deviation** (time, emission unit, description of event, cause)	**Description of Associated Monitoring Requirement**	**Description of corrective measures taken (*demonstrating a timely & appropriate response*)**

(Report deviations which may have caused excess emissions for more than one hour on a deviation report form, not here.